

Excalibur Installation Instructions



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Welcome to Excalibur Systems' suite of boards, cards and modules. This document describes how to install Excalibur hardware and software for Excalibur carrier boards, ExpressCards and PCMCIA cards.

Note: For UNETs, see the **Installation and Setup** chapter of your UNET's user's manual, instead of these installation instructions.

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1 Supported Operating Systems

The software installation instructions are for Windows 7 and later, and Linux. For older Windows operating systems, contact Excalibur Technical Support. See **Contacting Technical Support** on page 24.

2 CD Contents

The *Excalibur Installation CD* contains:

- All drivers and support files required for the installation of Excalibur carrier boards, ExpressCards, PCMCIA cards and UNET devices.
- A setup program to install Excalibur's *Excalibur Software Tools*.
- The user's manual for your carrier board and a programmer's reference for your software drivers.

Note: The *Excalibur Installation CD* you received with your package is the most recent release of the CD as of the date of shipping. Software and documentation updates can be found and downloaded from our website: www.mil-1553.com.

2.1 ARINC 429 Connection Precautions

The following connection precautions apply to all ARINC 429 boards and modules:

1. Verify the ARINC-429 line is not overloaded beyond the spec:
 - Rload > 400 ohm
 - Cload < 30,000 pF
2. Use shielded twisted pair wires with typical impedance of 60 to 80 Ohms.
3. Ensure that there is common ground between the connected systems in order to avoid potential differences.
4. Connect/Disconnect cables while the card is powered OFF or *not* transmitting at least.
5. Special care needs to be taken while applying probes of measuring instruments to avoid shorting out signals.

3 Hardware Installation

This section discusses hardware installation, and contains the following section:

- **PCI/PCIe Board, ExpressCard and PCMCIA Card Hardware Installation** on page 3
- **PMC Board Hardware Installation** on page 5
- **VME/VXI Board Hardware Installation on PCI-MXI-2 Systems** on page 7

3.1 PCI/PCIe Board, ExpressCard and PCMCIA Card Hardware Installation

Warning:

- *Whenever handling an Excalibur board, make sure to wear a suitably grounded electrostatic discharge (ESD) wrist strap.*
- *For boards with an ARINC 429 module, see **ARINC 429 Connection Precautions** on page 2.*
- *Our PCMCIA cards are designed for PCMCIA specification 2.1. The current PCMCIA specification is 5.1 (CardBus). Not all PCMCIA adapters are backwards compatible to 2.1, even when they claim to be.*

3.1.1 Assigning a Unique ID to the Board

Note: This section is not relevant to ExpressCards or PCMCIA cards. These cards use the Socket Number where the card is inserted instead of a Unique ID.

Each board must be assigned a Unique ID to identify the board when accessing it. When using only one PCI/PCIe/PMC board in your computer, it is not necessary to assign a Unique ID.

You can use any combination of up to 16 PCIe, PCI or cPCI boards in one computer. To use more than four boards, you must be using *Excalibur Software Tools* released on or after September 2007.

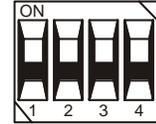
Note:

- Only four *PC/104-Plus* boards are supported on the same system.
- Only one ExpressCard of the same type is supported on the same system.

For PCI/PCIe boards, set DIP switch SW1 to a Unique ID by setting the switch contacts *open* (or *off*) to represent logic '1' and *closed* (or *on*) to represent logic '0'.

Set the DIP switch contacts as follows:

For Unique ID #:	Set the Contacts as Follows:			
	Contact #1	Contact #2	Contact #3	Contact #4
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
⋮				
15	1	1	1	1



For PC/104-Plus boards, use jumpers JP1 and JP2 to set the Unique ID. These through-hole jumpers represent a two-bit digit, of which JP2 is the most significant bit.

When a jumper is:

- **Not Installed**, a value of “1” will be set for that bit
- **Installed**, a value of “0” will be set for that bit

Set the jumpers as follows:

For Unique ID #:	Set the Jumpers as Follows:	
	JP1	JP2
0	Installed	Installed
1	Not Installed	Installed
2	Installed	Not Installed
3	Not Installed (default)	Not Installed (default)

3.1.2 Installing the Board or Card

Note: This section is for Windows. For Linux installation, see **Linux Hardware and Software Installation** on page page 17.

When installing the board, you need the hardware files specific to your operating system: 32-bit Windows, 64-bit Windows, or 64-bit Windows 10 Secure Boot. In addition, you need the *Excalibur Software Tools* for your board and its modules.

32-bit *Excalibur Software Tools* will run on 64-bit Windows, but 64-bit *Excalibur Software Tools* will not run on 32-bit Windows.

See the FAQ entitled **Driver Support for Various Windows Operating Systems - 64bit Windows and running a 32bit EXE** at: www.mil-1553.com/faqs that explains the installation requirements for hardware and software, for both 32-bit and 64-bit Windows.

To install an Excalibur carrier board or card:

1. Turn off your computer, and insert the board into one of the available slots. Make sure that the card is inserted all the way.
2. For PCI Express (PCIe) boards, connect a standard PC power cable from the computer's power supply to the J3 connector of the board. Without this, the modules on the board will not have sufficient power.
3. Start your computer and wait until Windows boots up.
4. Insert the *Excalibur Installation CD* in the CD drive.
5. To install the kernel driver, open the **Windows Device Manager**, right-click the Excalibur board/card, select **Update Driver [Software]**, select **Browse my computer for driver software**, then select the root folder of the *Excalibur Installation CD*. If there is no listing for an Excalibur board, look for a PCI Device with a yellow question mark. If you have trouble locating the board/card in the **Windows Device Manager**, contact Technical Support. See **Contacting Technical Support** on page 24.
6. If you are prompted to reboot your computer, reboot now.

The board installation is complete.

Note:

- On certain boards you may be warned that the software driver is not signed with Authenticode™. Click **Yes** to continue the installation.

3.1.3 Verifying Board/Card Installation

To verify board/card installation:

1. Make sure that the Excalibur board/card is in place in the computer.
2. Right-click **My Computer** and select **Properties**.
The **System Properties** dialog box is displayed.
3. Open the **Windows Device Manager**.
4. Double-click **Excalibur PCI Cards** or **Excalibur PCMCIA Cards**.
5. Verify that the Excalibur board/card is listed next to one of the following icons:
 ,  or .
6. If you see a yellow exclamation point (!) or a yellow question mark (?), this indicates that the board/card is not properly installed. In this case, verify that all Windows updates are installed and that you are using the latest kernel driver available for your board. See: www.mil-1553.com/kernel-drivers.

3.2 PMC Board Hardware Installation

Warning:

- *Whenever handling an Excalibur board, make sure to wear a suitably grounded electrostatic discharge (ESD) wrist strap.*
- *For boards with an ARINC 429 module, see **ARINC 429 Connection Precautions** on page 2.*

3.2.1 Assigning a Unique ID to the Board

Each board must be assigned a Unique ID (or 'Selected ID') by setting jumpers JP1–JP4, which correspond to bits 00–03 of the **Board Identification Register**. When using only one PCI/PCIe/PMC board in your computer, it is not necessary to assign a Unique ID.

- Jumper shorted = logic 0 at bit position
- Jumper open = logic 1 at bit position

The factory default setting for these jumpers is shorted, for a Unique ID (or 'Selected ID') of 0.

The following table shows which jumper represents each Selected ID bit:

<i>EXC-1553[cc]PMC/Px</i>		<i>EXC-1553[cc]PMC/MCH</i>		<i>DAS-429[cc]PMC/RTx[D], EXC-708ccPMC</i>	
Jumper	Selected ID Bit	Jumper	Selected ID Bit	Jumper	Selected ID Bit
JP163	0	JR36	0	JP1	0
JP162	1	JR33	1	JP2	1
–	2	JR30	2	JP3	2
–	3	JR27	3	JP4	3

Set the bits as follows:

For Unique ID #:	Set the Bits as Follows:			
	Selected ID Bit #3	Selected ID Bit #2	Selected ID Bit #1	Selected ID Bit #0
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
•				
•				
•				
15	1	1	1	1

3.2.2 Installing a PMC Board on a [c]PCI Carrier Board

When installing a PMC Board on a [c]PCI carrier board, after setting the Unique ID jumpers and installing the PMC Board on the [c]PCI carrier board, the rest of the installation is the same as a PCI[e] carrier board. See **Hardware Installation** on page 3.

3.3 VME/VXI Board Hardware Installation on PCI-MXI-2 Systems

Warning:

- *Whenever handling an Excalibur board, make sure to wear a suitably grounded electrostatic discharge (ESD) wrist strap.*
- *For boards with an ARINC 429 module, see ARINC 429 Connection Precautions on page 2.*

3.3.1 Assigning a Device ID to the Board

Before installing the board, you must assign a unique logical address to the board.

On a *EXC-4000VME/VXI* board, use DIP switch SW1.

Switch ON or Closed = logic 0 at switch position

Switch OFF or Open = logic 1 at switch position

On a *EXC-1553ccVME/Px* board, use jumpers JP1–JP8.

Jumper shorted = logic 0

Jumper open = logic 1

An *EXC-4000VME/VXI* board requires a 1MB area of memory within A24 or A32 memory space. An *EXC-1553ccVME/Px* board requires a 2MB.

Choose a logical address (within A16 memory space) that does not conflict with any other devices in your system. By default, the board is set to the address 80H (128 Dec.).

Warning: *If a logical address is already in use and it is also used for this board, the board will not function properly.*

Examples of Logical Address DIP Switch/Jumper Settings:

		MSB Logical Address DIP Switch/Jumper Settings LSB							
'1'	'1'	1	2	3	4	5	6	7	8
A15	A14	A13	A12	A11	A10	A9	A8	A7	A6
Logical Address		DIP Switch/Jumper Settings							
Hex	Dec								
1	1	0	0	0	0	0	0	0	1
20	32	0	0	1	0	0	0	0	0
80	128	1	0	0	0	0	0	0	0
81	129	1	0	0	0	0	0	0	1
C0	192	1	1	0	0	0	0	0	0
FF	255	1	1	1	1	1	1	1	1

Example:

- For an *EXC-4000VME/VXI* board, for a logical address of C0 (H) [=A16 Address F000 (H)], set position 1 and 2 to OFF or Open and all other switches to ON or Closed.
- For an *EXC-1553ccVME/Px* board, for a logical address of C0 (H) [=A16 Address F000 (H)], short jumpers JP3–JP8, and do not short jumpers JP1 and JP2.

Note:

- The numbers in the above table under DIP Switch/Jumper Settings indicate switch/jumper positions.
- Address lines A15 and A14 are always decoded as '1'.
- Address lines A5–A0 are always decoded as '0'.

3.3.2 Installing the Board

To install a VME/VXI board:

1. Make sure the computer is turned off.
2. Insert the board into one of the available slots.
3. Start your computer and wait until Windows boots up.
4. Ensure the National Instruments PCI-MXI-2 system is installed correctly.
5. Run Resman, the resources manager, to establish a connection to the board.

Note: Earlier versions of the National Instruments PCI-MXI-2 may also require running VXIINIT, the hardware initialization program.

3.3.3 Verifying VME/VXI User Window Size

This section discusses how to verify that there is enough memory (user window size) on the VME/VXI machine for the board (8 MB).

Note: If there is not enough memory, the board may not work properly.

To verify user window size:

1. Install the current version of NI-VXI_VISA Tools for PCI Based MXI-2 for Windows available at: www.ni.com.
2. Use the Windows search feature on the Windows Taskbar to find and open **Measurements & Automation**.
The **Measurements & Automation Explorer** main screen is displayed.
3. Under **Configuration**, double-click **Devices and Interfaces**.
All devices and interfaces are displayed.
4. Right-click on **VXI Systems 0 (PCI-MXI-2)**, and select **Hardware Configuration**.
The **Settings for PCI-MXI-2** dialog box is displayed.

5. Click the **PCI** tab.
6. In the **User window size** field, select **8 MB**.
7. Click **OK**.
8. Reboot your Computer.

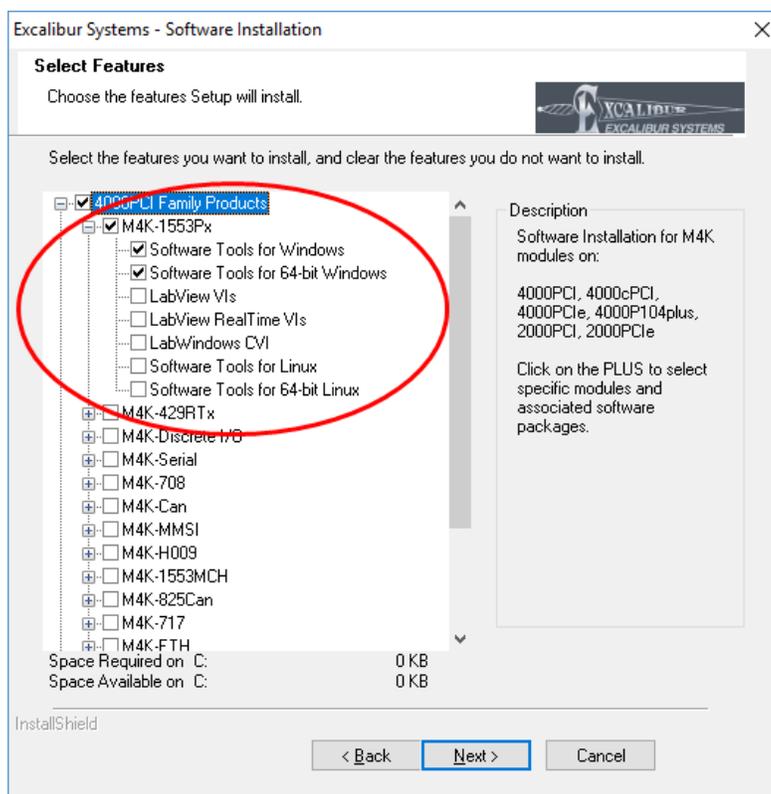
3.3.4 Multiple Board Support for VME/VXI Boards

ExcConfig is not used for VME/VXI boards to assign a device number to the board. Support for the use of multiple boards is implemented via the module specific `Init_Module` function. See the *Programmer's Reference* for your module.

4 Software Installation

This section describes how to install the *Excalibur Software Tools* for your Excalibur board and its modules. *Windows Excalibur Software Tools* are available for all modules. Other software may not be available for your module. The **InstallShield Wizard** lists the available software for each module.

The following figure shows the various API software that can be installed for one module.



Continue with one of the following:

- **Windows Software Installation** on page 10
- **Linux Hardware and Software Installation** on page 17

4.1 Windows Software Installation

The **InstallShield Wizard** runs on Windows, and can be used to install Windows *Excalibur Software Tools*, LabVIEW VIs, LabVIEW Real-Time VIs and LabWindows CVI, if they are available for your modules. 32-bit Windows *Excalibur Software Tools* are available for all modules.

Note: *Excalibur Software Tools* for VME/VXI boards were written for the VISA standard.

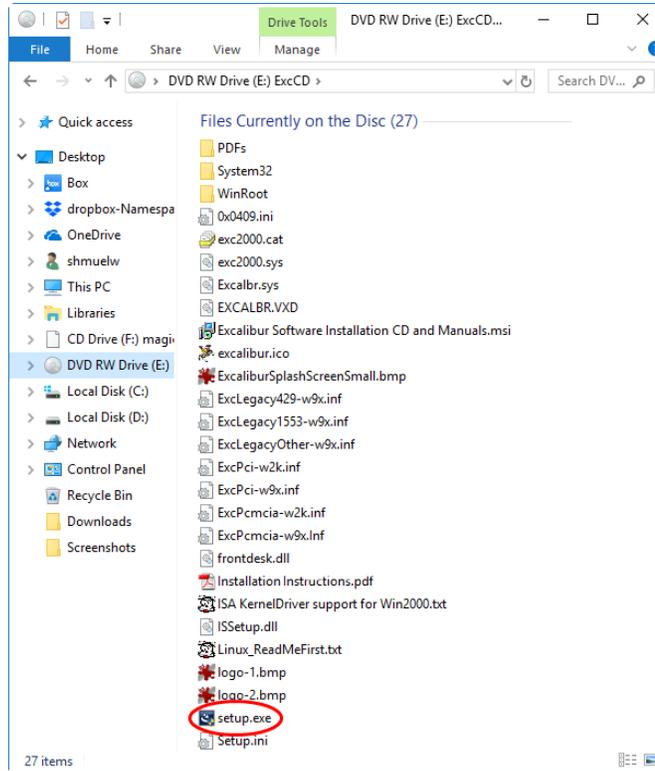
It is **strongly** recommended to uninstall the previous version of the *Excalibur Software Tools* before installing the new version. For information on uninstalling, see **Uninstalling the Excalibur Software Tools** on page 23. If you want to save the earlier version, move the software folder from its current location, uninstall the *Excalibur Software Tools*, then install the current version of the *Excalibur Software Tools*.

The **InstallShield Wizard** installs the *Excalibur Software Tools* for all the boards and modules. The *Excalibur Software Tools* for each module type is a separate *Excalibur Software Tools* product. When installing more than one *Excalibur Software Tools* product, the **InstallShield Wizard** runs separately for each product, one after the other, until they are all installed.

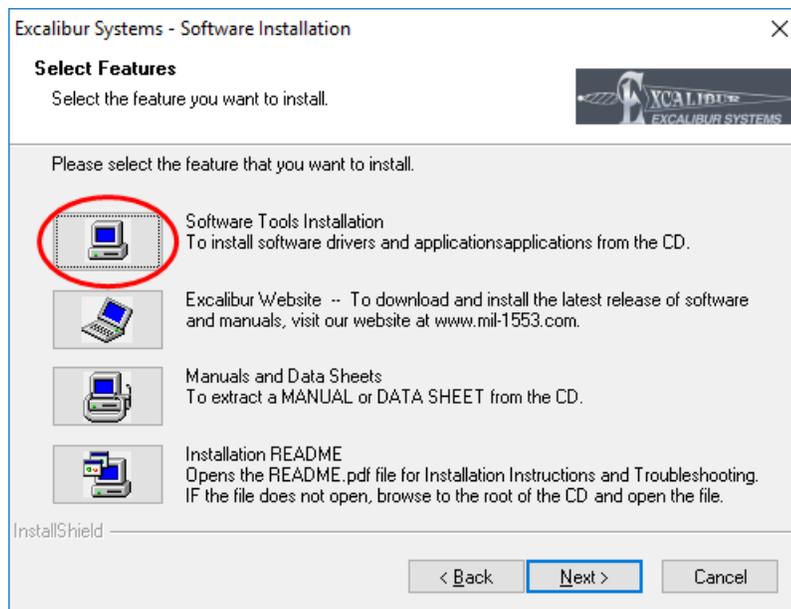
After installing the *Excalibur Software Tools*, the **InstallShield Wizard** installs all Excalibur utilities related to your board's modules, such as MerlinPlus for MIL-STD-1553 modules and Mystic for ARINC 429.

To install the *Excalibur Software Tools*:

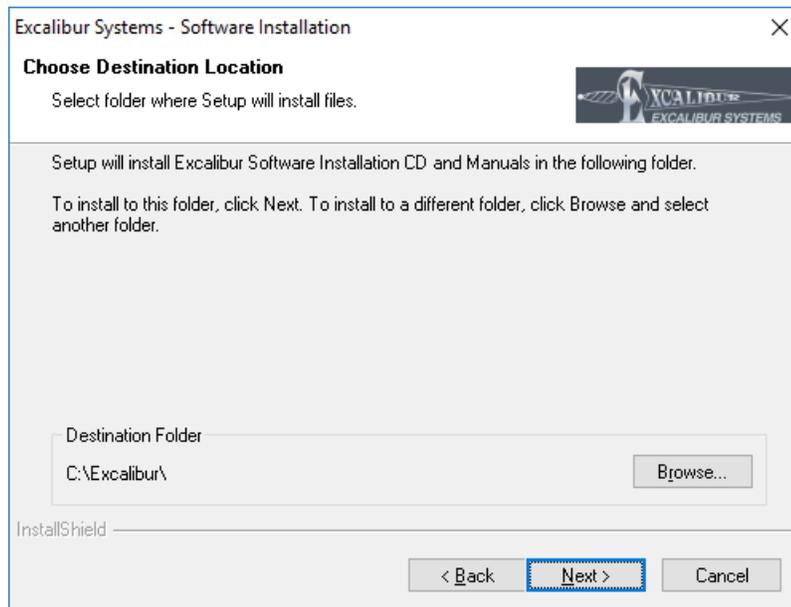
1. Insert the *Excalibur Installation CD* in the CD drive.
2. Double-click **setup.exe** on the root of the installation CD to start the **InstallShield Wizard**.



3. Follow the on-screen instructions until you reach the following screen.

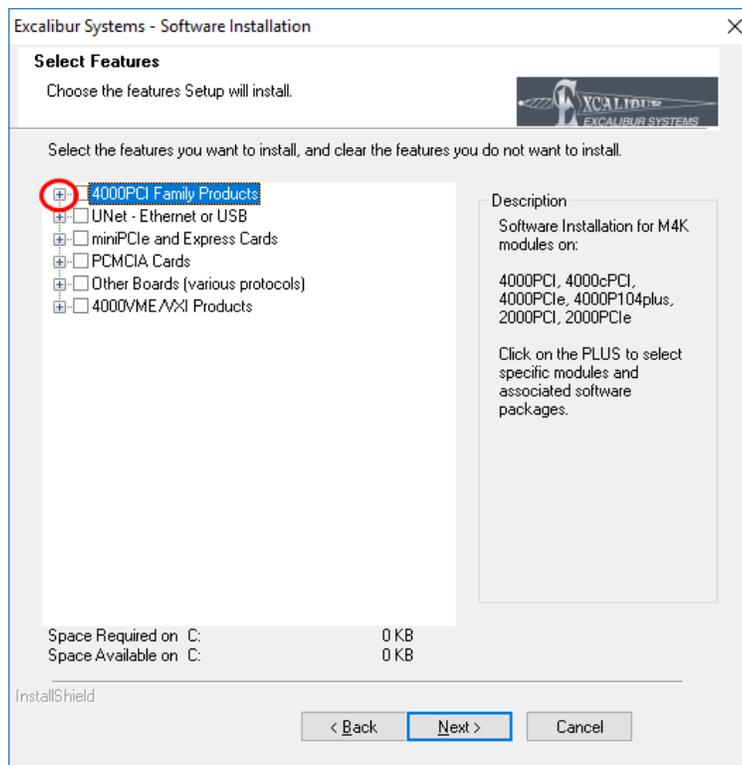


4. Select **Software Tools Installation**, then click **Next**.

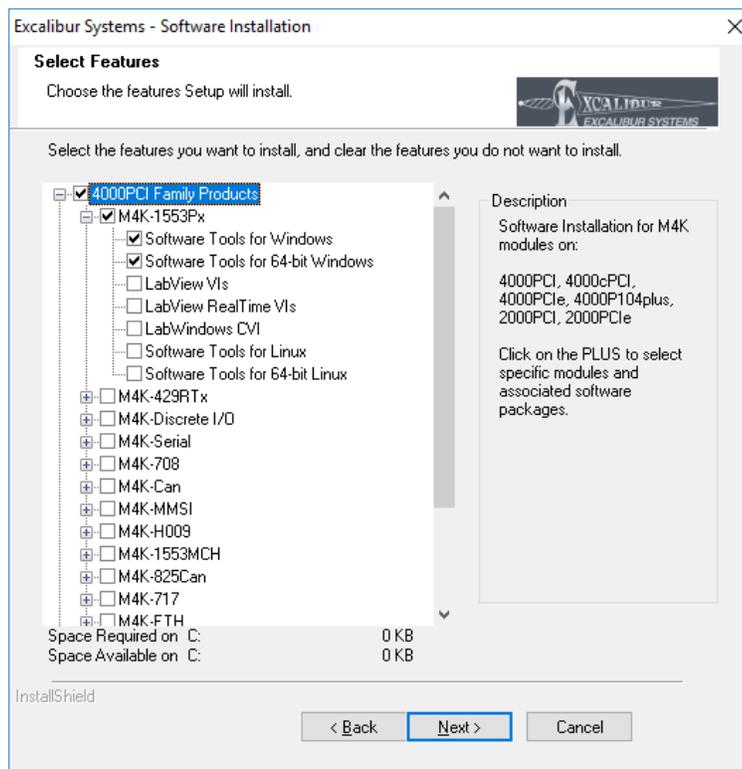


5. Select the installation location, then click **Next**.

Note: It is **not** recommended to install the *Excalibur Software Tools* in the **Program Files** or **Program Files (x86)** folders, since you cannot easily write files to these locations, for example, when compiling.



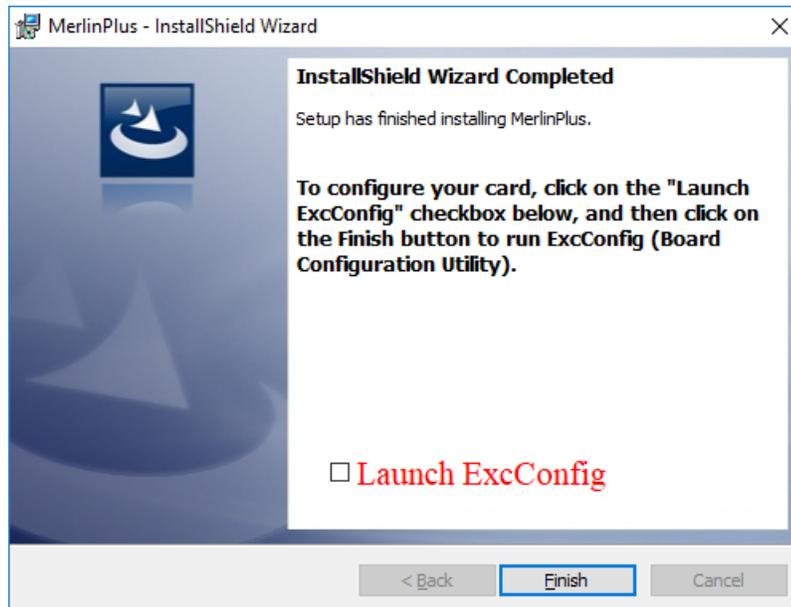
6. Click the plus sign (+) next to your product group, click the plus sign (+) next to your product, then select the items that you want to install, as shown in the following figure.



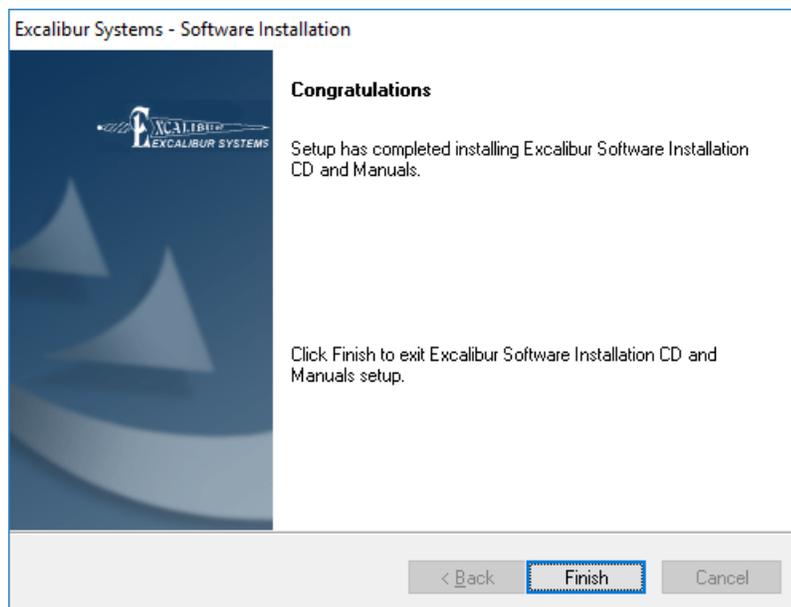
7. Click **Next**.

After installing the *Excalibur Software Tools*, the **InstallShield Wizard** installs utilities related to the modules on your board, such as MerlinPlus for MIL-STD-1553 modules and Mystic for ARINC 429.

When all related utilities are installed, the following screen is displayed.



8. Select the **Launch ExcConfig** checkbox, then click **Finish**.



9. Click **Finish** again, and continue with **ExcConfig**. See **Assigning a Device Number to the Board** on page 15.

Note: The **ExcConfig** window may open before the above screen is displayed.

4.1.1 Assigning a Device Number to the Board

Note: This section is not relevant to VME/VXI boards. See **Multiple Board Support for VME/VXI Boards** on page 9.

After the **InstallShield Wizard** installs the *Excalibur Software Tools* and related utilities, the **InstallShield Wizard** runs **ExcConfig**.

ExcConfig assigns a device number of 0 – 15 to the board, which is used when running *Excalibur's Software Tools*. The first function generally called in an application program is `Init_Module`, and `Init_Module` requires the device number as one of its parameters.

ExcConfig assigns a device number by creating an association between a selected device number and the Unique Identifier of the board, and storing this information in the Windows Registry.

The Unique Identifier is set by a DIP switch or jumpers on the board. (For more details, see your board's user's manual. In the user's manual, the Unique Identifier is called the Selected ID.) For ExpressCard and PCMCIA cards, there are no DIP switches or jumpers for setting the Unique Identifier; the Socket Number is used instead.

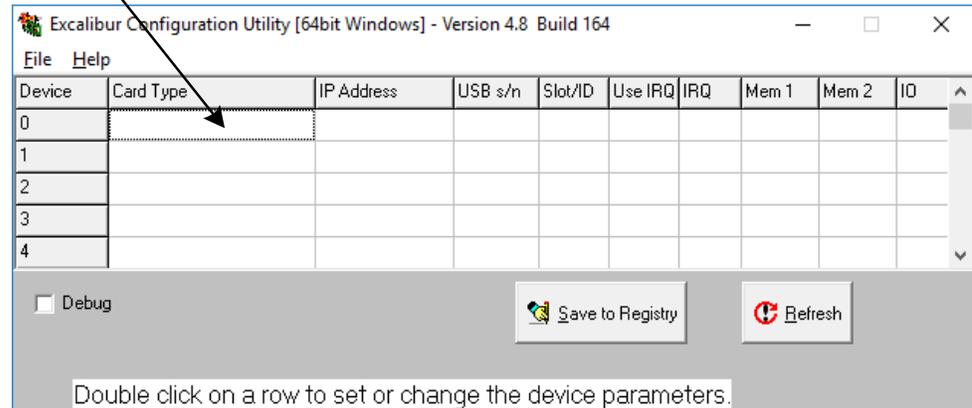
Note: When only one board of the same type is installed in your computer, you have the option of using the board's default device number instead of running **ExcConfig**. However, you cannot use the default device number when you have two or more boards in the computer that have the same default device number, or if your board does not have a default device number. The following table lists the default device numbers for most board types.

Board Type	Default Device Number	#define Value
UNET, RUNET	None – the board's device number must be set via ExcConfig	N/A
VME, VPX	None – the board's device number must be set via a DIP switch (or jumper)	N/A
Ethernet, 664 (AFDX)	34 (dec)	EXC_ETHERNET_PCIE or EXC_664_PCIE
1394	32 (dec)	EXC_1394PCI
MCH	29 (dec)	EXC_1553PCIMCH
All Other Boards in this Manual	25 (dec)	EXC_4000PCI

To assign a device number using ExcConfig:

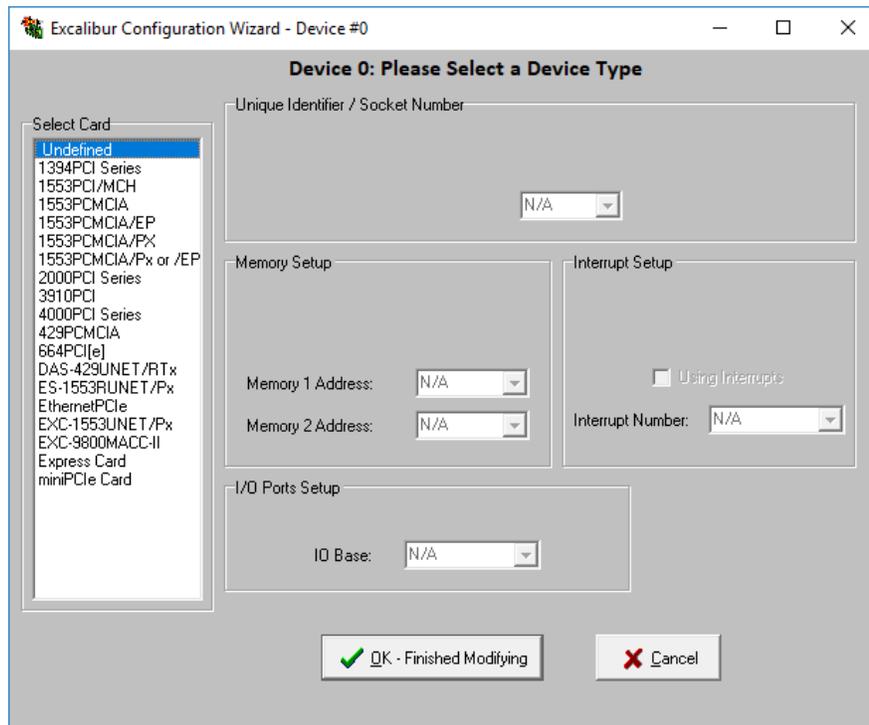
1. After the InstallShield Wizard installs the *Excalibur Software Tools* and related utilities, the InstallShield Wizard runs ExcConfig.

Double-click on this row to assign device #0 to the board



2. Double-click on a row in the table. The number of this row will be assigned to the device.

The next screen of the wizard is displayed.

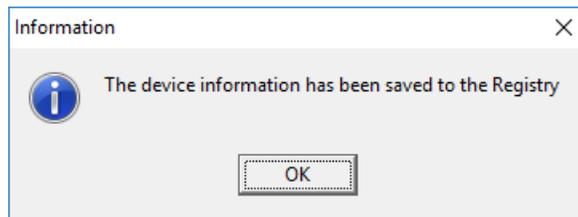


3. Under **Select Card**, select an Excalibur board or device.
4. If you are using a single Excalibur board/device in the computer, you can leave the **Unique ID / Socket Number** as **Auto**. If you are using multiple boards, select the

Unique ID of the board/device as set by the DIP switch or jumper on the board.
(For PCMCIA cards, select the slot number.)

5. Leave the remaining fields with their default values.
6. Click **OK - Finished Modifying** to add the information to the Windows Registry.

The following message is displayed.



7. Click **OK**.
8. Repeat steps 2–7 for each board/card.
9. Reboot your computer. For ExpressCards and PCMCIA cards, leave the card in the computer throughout the reboot operation.

4.2 Linux Hardware and Software Installation

The Linux *Excalibur Software Tools* are distributed as a compressed tar archive (**.tgz** or **.tar.gz**), and can be extracted to any convenient location on the file system. You can get this file by either running the Windows installer and selecting to install the Linux software, or by copying it directly from the *Excalibur Installation CD*. The files are located on the CD at **WinRoot\Excalibur**. Each Linux installation has the word Linux in the folder name.

After extracting the **.tgz** or **.tar.gz** file on your Linux computer, there are several files and folders in the root folder. The root folder contains various readme files with information on device driver and software installation, revision history files, and the following folders:

- **API** – Contains the source files for the *Excalibur Software Tools* library, and a compiled version of the static (**.a**) library. These files are sometimes located in the main folder itself, not the **API** folder.
- **Demos** or **DemoPrograms** – Contains source code for demos as well as compiled versions of the programs.
- **driver** – Contains the code for the kernel driver for our PCI[e] cards and a compiled version for the latest version of Red Hat Enterprise Linux.
- **phex** – Contains the phex memory dump utility.

In versions of the *Excalibur Software Tools* that support the UNET, there is a readme for the UNET as well as an example **.ini** file for configuring the device numbers, since the UNET does not use the kernel driver.

Since the *Excalibur Software Tools* are compiled into a static library under Linux, there is no need to add any folders to the **LD_LIBRARY_PATH** or copy any files into system folders for linking.

4.3 Checking for Software Updates

The *Excalibur Installation CD* you received with your package is the most recent release of the CD as of the date of shipping. Software and documentation updates can be downloaded from our website: www.mil-1553.com/downloads.

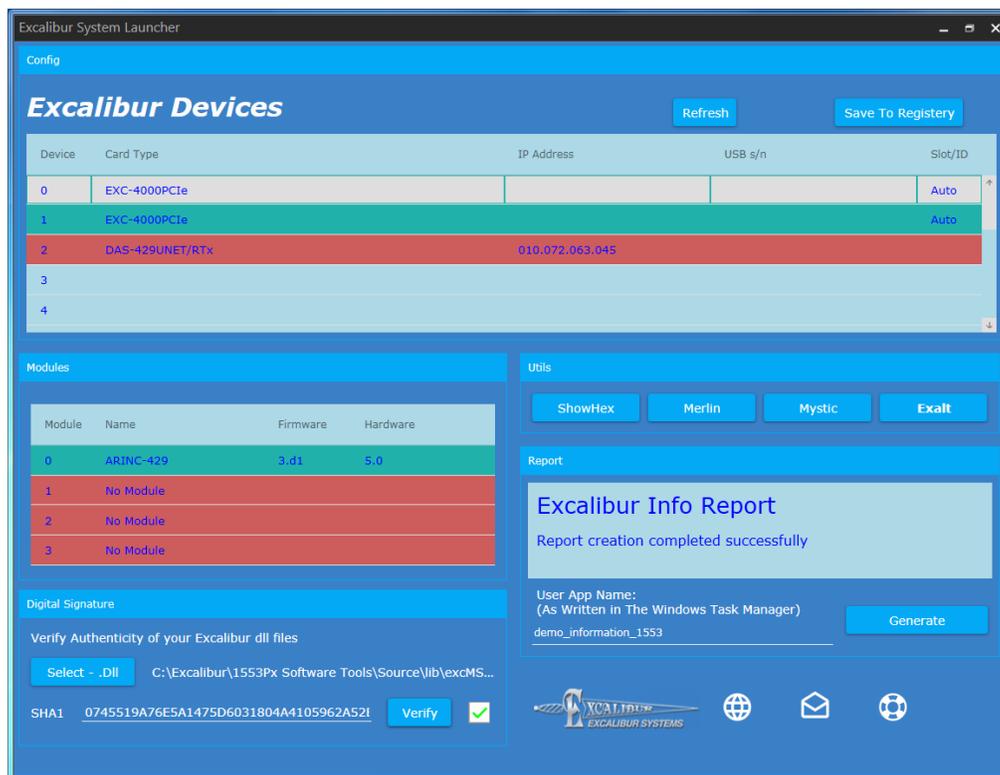
To check your software version, see the **RevisionHistory** file in the folder where your Excalibur software is installed. You can compare this to the *Excalibur Software Tools* on our website by downloading and unzipping the *Excalibur Software Tools*, then checking the **RevisionHistory** file.

4.4 Excalibur System Launcher

The *Excalibur System Launcher* allows you to assign a device number to the board, (instead of using ExcConfig). In addition, the *Launcher* has diagnostic tools and gives easy access to Excalibur utilities.

The *Launcher* has five sections:

- **Config** – Assigns a device number to the board (like ExcConfig).
- **Modules** – Lists the modules on the selected board. In the device list, the boards that are installed are listed in green. The others are listed in red. Click a board in the list to show its modules in the Modules section.
- **Digital Signature** – Verifies the digital signature of a DLL.
- **Utils** – Provides quick access to *Exalt Plus* and Excalibur utilities. *Exalt Plus* is ordered separately. If *Exalt Plus* is not installed, clicking the Exalt button take s you to the *Exalt Plus* trial version on the Excalibur website.
- **Report** – Generates a report about a running API application.



4.4.1 Assigning a Device Number Using the *Launcher*

You can use the *Launcher* to assign a device number of 0 – 15 to the board, which is used when running *Excalibur Software Tools*. The first function generally called in an application program is `Init_Module`, and `Init_Module` requires the device number as one of its parameters.

The *Launcher* assigns a device number by creating an association between a selected device number and the Unique Identifier of the board, and storing this information in the Windows Registry.

The Unique Identifier is set by a DIP switch or jumpers on the board. (For more details, see your board's user's manual. In the user's manual, the Unique Identifier is called the Selected ID.) For ExpressCard and PCMCIA cards, there are no DIP switches or jumpers for setting the Unique Identifier; the Socket Number is used instead.

Note: When only one board of the same type is installed in your computer, you have the option of using the board's default device number instead of running `ExcConfig`. However, you cannot use the default device number when you have two or more boards in the computer that have the same default device number, or if your board does not have a default device number. The following table lists the default device numbers for most board types.

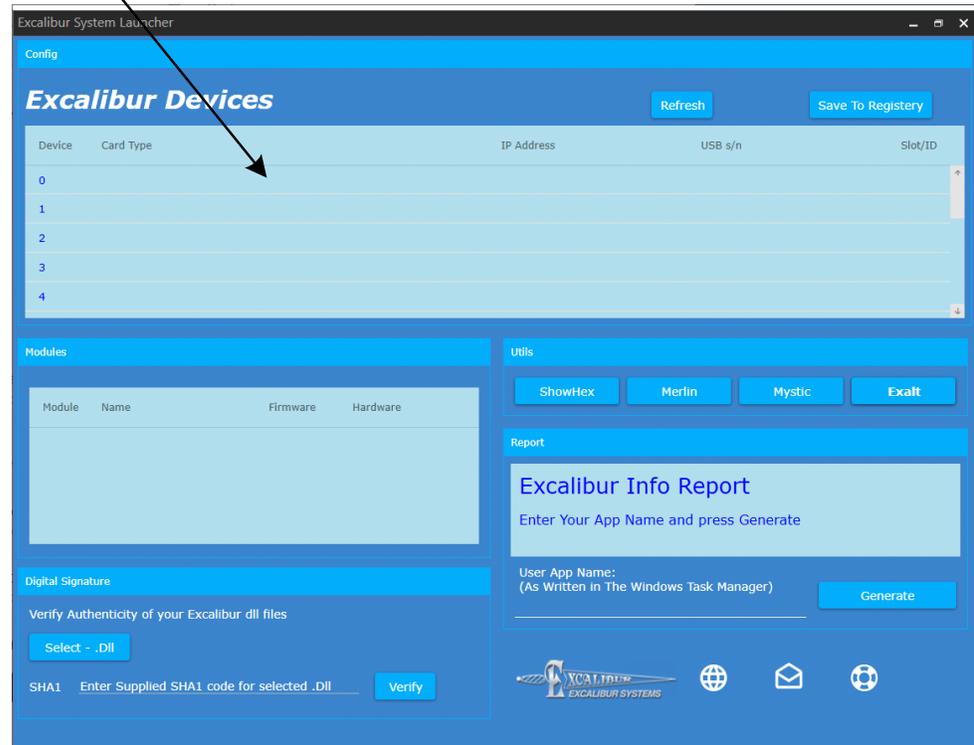
Board Type	Default Device Number	#define Value
UNET, RUNET	None – the board's device number must be set via ExcConfig	N/A
VME, VPX	None – the board's device number must be set via a DIP switch (or jumper)	N/A
Ethernet, 664 (AFDX)	34 (dec)	EXC_ETHERNET_PCIE or EXC_664_PCIE
1394	32 (dec)	EXC_1394PCI
MCH	29 (dec)	EXC_1553PCIMCH
All Other Boards in this Manual	25 (dec)	EXC_4000PCI

To assign g a device number using the *Launcher*:

1. Use the Windows search feature on the Windows Taskbar to find and open **ExcLaunchPad**.

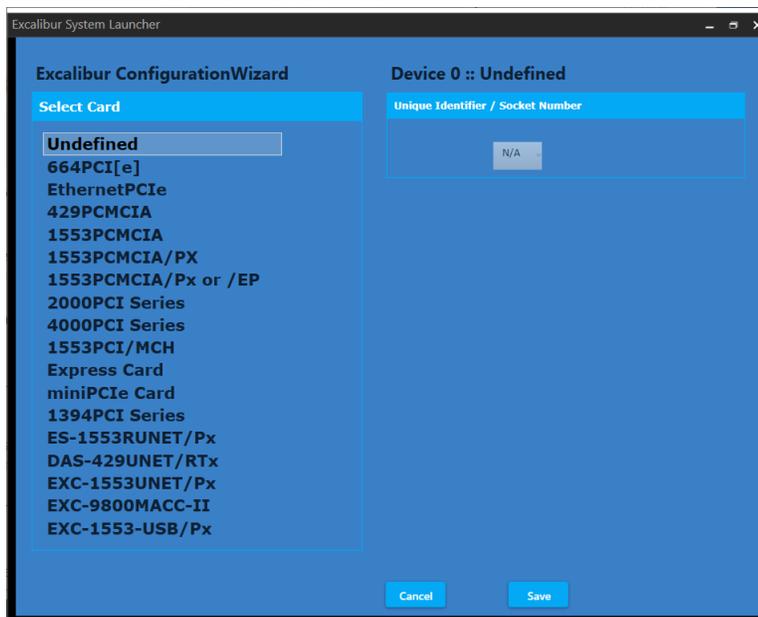
The *Excalibur System Launcher* is displayed.

Double-click on this row to assign device #0 to the board



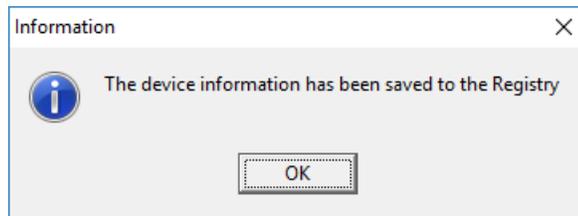
2. Double-click on a row in the table. The number of this row will be assigned to the device.

The next screen of the wizard is displayed.



3. Under **Select Card**, select an Excalibur board or device.

4. If you are using a single Excalibur board/device in the computer, you can leave the **Unique ID / Socket Number** as **Auto**. If you are using multiple boards, select the Unique ID of the board/device as set by the DIP switch or jumper on the board. (For PCMCIA cards, select the slot number.)
5. Leave the remaining fields with their default values.
6. Click **OK - Finished Modifying** to add the information to the Windows Registry.
The following message is displayed.



7. Click **OK**.
The board appears following message is displayed.
8. Repeat steps 2–7 for each board/card.
9. Reboot your computer. For ExpressCards and PCMCIA cards, leave the card in the computer throughout the reboot operation.

4.4.2 Verifying the Digital Signature of a DLL

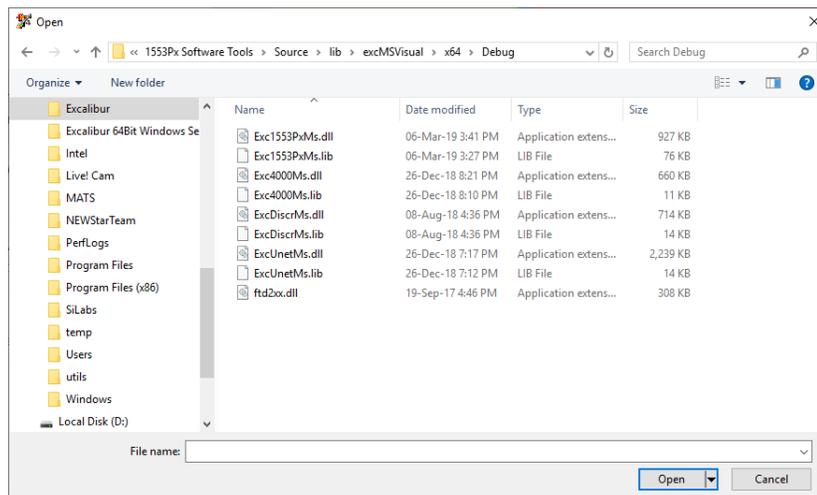
To verify the digital signature of a DLL:

1. Use the Windows search feature on the Windows Taskbar to find and open **ExclaunchPad**.

The *Excalibur System Launcher* is displayed.

2. Click **Select - .DLL**.

The Open dialog box is displayed.



3. Select a DLL, then click **Open**.

The filename and path of the DLL are displayed in the *Launcher*.

4. Copy the SHA-1 code from the Revision History file and paste it into the **SHA1** field in the *Launcher*.

The Revision History files are located in:

C:\Excalibur\Module_Name Software Tools\Source\lib

5. Click **Verify**.

If the file is genuine, a check mark appears next to the **Verify** button.

4.4.3 Generating a Report about a DLL or About the Installed Boards

Use the Report feature of the *Launcher* to generate a report about a running application that uses *Excalibur Software Tools*, or to generate a report about the installed boards and the operating environment.

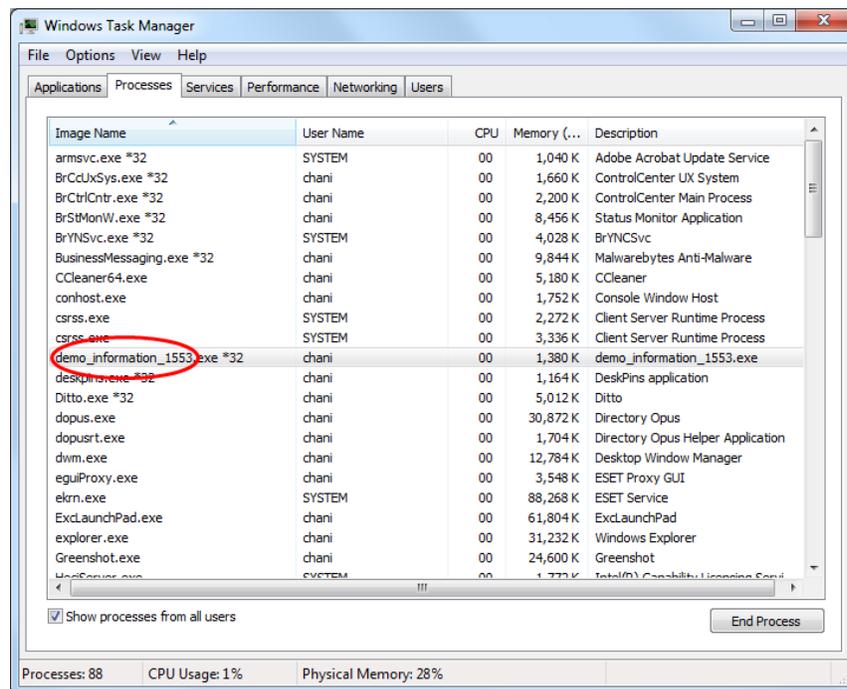
To generate a report:

1. Use the Windows search feature on the Windows Taskbar to find and open **ExclaunchPad**.

The *Excalibur System Launcher* is displayed.

2. Do one of the following:

- To generate a report about the installed board and the operating environment, click **Generate**.
- To generate a report about a running application that uses *Excalibur Software Tools*, type the name of the application under **User App Name**, exactly as it appears in the Windows Task Manager, **not including** the .exe extension.



3. Click **Generate**.

The report is generated, and saved in:
C:\Excalibur\Reports

5 Running a Test Program

The *Excalibur Software Tools* for each module/card includes various demo programs to verify that the specific module/card is operating properly. The source code is provided with the demo programs as a guide to develop your own applications using the *Excalibur Software Tools* for the module/card.

The source code is located at:

C:\Excalibur\Module_Name Software Tools\Source\demos_Module_Or_Board

6 Uninstalling the *Excalibur Software Tools*

When installing the *Excalibur Software Tools* from the *Excalibur Installation CD*, the **InstallShield Wizard** copies an individual installers for each set of *Excalibur Software Tools* and each utility to your computer, then runs the individual installers.

Since the *Excalibur Installation CD* does not directly install the *Excalibur Software Tools* or the utilities, uninstalling the item called **Excalibur Software Installation CD and Manuals** (in Programs and Features in the Control Panel or Apps & features in Windows 10) will only remove the installation files, but will not uninstall the *Excalibur Software Tools* or the utilities, since they were installed with separate installers.

Therefore, you must install the individual *Excalibur Software Tools* and utilities that you want to uninstall, via the Control Panel or Windows Settings.

To find all Excalibur programs installed, open Programs and Features in the Control Panel, click the top of the Publisher column to sort by publisher, then scroll down until you get to the Excalibur programs. In Windows 10, you can go to Apps & features and type Excalibur in the search box.

7 Troubleshooting

The installation packages for all of our software products are created using InstallShield. Each of these installation setups are available on our website. The Excalibur CD software installation also runs these individual setups when installing most of our products.

Some products were created with an older version of InstallShield, which does not run on newer machines and operating systems. You can install on an older version of Windows and then copy the target installation folder to your newer machine.

If you try to install a native 64-bit installation package on 32-bit Windows, you will receive a message “This installation is not supported by this processor type. Contact your product vendor.”

8 Contacting Technical Support

Excalibur Systems is ready to assist you with any technical questions you may have. For technical support, click the **Technical Support** link on the **Support** page of our website: www.mil-1553.com. You can also contact us by phone. To find the location nearest you, refer to the **Contact Us** page of our website.

Before contacting Technical Support, please see **Information Required for Technical Support** at <https://www.mil-1553.com/faqs>.

The information contained in this document is believed to be accurate. However, no responsibility is assumed by Excalibur Systems, Inc. for its use and no license or rights are granted by implication or otherwise in connection therewith. Specifications are subject to change without notice.

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